

# Participatory approaches to disaster risk research and education

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**Abstract.** This workshop drew on Lancaster University's research on the role of children and young people in disaster recovery and resilience building. We explored some of the creative, participatory methods used on the UK Economic and Social Research Council project, *Children, Young People and Flooding: Recovery and Resilience* (2014-16) and the European Commission H2020 project CUIDAR: *Cultures of Disaster Resilience among Children and Young People* (2015-18). These methods encouraged children to explore their local environment, to share and reflect on their knowledge and experiences and to contribute as actors to community resilience building. The session introduced educational and community engagement materials we have developed from the research data, including the 'Flood Snakes & Ladders' simulation game, which invites participants to walk in the shoes of children seriously affected by flooding and thereby consider how to plan better for future disasters.

**Key Words:** Disaster Risk Resilience, Participation, Children and Young People

This letter reports on the preconference session of the Society for Risk Analysis Japan 31st Annual Meeting on November 9, 2018. The session aimed to: 1) introduce Lancaster University's recent research on the role of children and young people in disaster recovery and resilience building; 2) explore some of the creative, participatory methods used during these projects and discuss their application in Japan.

The session involved a combination of presentation, activities and discussion. I first provided some background information on Lancaster's projects and our team's social scientific approach to researching people's experience of disaster (Figure 1). Delegates were then invited to take part in a mapping activity, spending five minutes creating a personal 'map' of a walk that they know well – or knew well from their past. These were shared in pairs before being displayed on a large table so everyone could take a look at what had been created (Figure 2). Delegates were then asked to discuss: what they liked about this activity; any challenges and/or surprises; and what

they considered to be the benefits of conducting an activity like this. People talked about how the game helped them to learn more about each other and discover things they might not otherwise find out. Delegates also mentioned how the activity was a good way to access memories.

Following the discussion, I gave some brief theoretical background to participatory research, in particular Paulo Freire's model of critical pedagogy and Roger Hart's 'ladder of participation' in work with children (Freire P, 1996; Hart R, 1992). I then went on to explain the use of participatory methods in Lancaster University's *Children, Young People and Flooding* project (Mort M, et al., 2018). During this project with two groups of flood-affected children and young people in England, our research team drew on forms of 'mapping' such as walking and talking with the children around the flooded landscape, taking photographs, theatre/drama and 3D model-making. These approaches encouraged the children to connect with and explore their local environment, to recall

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memories and find different, sometimes non-verbal, ways to express their experiences and ideas.

Some of the data generated during these workshops (photographs, models, transcripts) were shared in a later workshop with the children who helped to identify some of the key themes raised by the data. The children were also asked to think about the stakeholders involved in flood risk management – from family to local to national level. They then worked with the research team to create ‘Flood Manifestos’ that set out their ideas for change and also to devise final performance events that presented their experiences and manifestos to audiences comprised of stakeholders they had identified (Lloyd Williams A, et al. 2017).

The performance events the children took part in centred on the concept of ‘snakes and ladders.’ The performances invited the audience to walk in children’s shoes and experience flooding and the lengthy recovery process from a child’s perspective, using transcript extracts and photographs from the project, as well as short drama scenes that the children created in response to some of the data. The snakes and ladders concept demonstrated how the recovery process was far from smooth, involving many ‘ups and downs’ which sometimes seemed to be down to luck, rather than design.

Our team realised the power of this game to raise awareness among stakeholders about the need for greater flood preparedness as well as develop better understanding of the needs and abilities of children in disasters. We were also mindful of the children’s call in their manifestos for more flood education and for teachers and schools to receive training about how flooding can affect children. As a result, we have developed a new version of the game that can be played with practitioners, policymakers and even

older school/university students (Lancaster University Flood Project Team, 2018).

The meeting delegates were invited to participate in this new version of the game in two teams (Figure 2). Some participants took roles as ‘players’ of the game, rolling the dice on the large, giant board, and others created sound effects as the players moved up and down the game. As each player landed on a square on the board, an image and text appeared on the screen and a child’s voice was heard reading out extracts from the data alongside images of models or photographs taken during the walks.

When the game finished, the delegates were invited to discuss their experience in groups, reflecting on how this approach could be adapted or applied in the Japanese context and asking questions. They then wrote final reflections on a post-it note that was put on the wall as the session came to a close. In this feedback, the delegates responded positively to the method and the way that the game provided insights into children’s experiences and ideas for resilience building and they were keen to learn more about the process of how the game was created and how to evaluate work of this kind.

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Figure 1. Workshop slides about Lancaster University's Flood Project



Figure 2. Mapping activity (left) and Flood Snakes & Ladders (right)

## References

- Freire, P., (1996) *Pedagogy of the oppressed*, 3rd ed., translated by Myra Bergman Ramos, New York: Continuum.
- Hart, R., (1992) *Children's participation: from tokenism to citizenship*, Florence: UNICEF.
- Lancaster University Flood Project Team, (2018) *Flood Snakes & Ladders*, <http://www.lancaster.ac.uk/floodrecovery/our-outputs/flood-snakes-and-ladders/>
- Lloyd Williams, A., Bingley, A., Walker, M., and Mort, M., (2017) 'That's where I first saw the water...': mobilizing children's voices in UK flood risk management, *Transfers* 7(3), 76 - 93.
- Mort, M., Walker, M., Lloyd Williams, A., and Bingley, A., (2018) From victims to actors: the role of children and young people in flood recovery and resilience, *Environment and Planning C: Politics and Space* 36(3), 423 - 442.